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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,138	02/18/2004	Kevin Corcoran	ORM / 242US	3385
26875 7590 06/05/2007 WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			EXAMINER PICKETT, JOHN G	
			ART UNIT 3728	PAPER NUMBER
			MAIL DATE 06/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/781,138	Applicant(s) CORCORAN ET AL.	
	Examiner Greg Pickett	Art Unit 3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action acknowledges the applicant's amendment filed 9 January 2007. Claims 7-32 are pending in the application. Claims 1-6 have been canceled. Claims 21-32 are new to the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Observations

3. Applicant's claim language is replete with functional language. In accordance with MPEP 2111.01, during examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004).

It is well settled that it is possible for functional language to define structure, but that where no distinguishing structure has been defined, the claim is not patentable and is fully met by the reference. See *In re Swinehart*, 169 USPQ 226. See also *General Electric v. United States*, 198 USPQ 73 which further reinforced the concept that functional language which defines no structure cannot distinguish over the prior art. Moreover, "[A]pparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

With respect to independent claim 7, the passages, "for storing orthodontic appliances... to a setup tray" and "for holding a plurality of orthodontic appliances..., for transfer to a setup tray... of the appliance" are considered intended use recitations. The structure for restraining the setup trays within a support is not defined in the claim; therefore any structure capable of restraining a tray will meet the claim language as presented. The structures for the holders to hold the appliances are not defined in the claim; therefore any structure capable of holding an undefined appliance in a fixed orientation will meet the claim language as presented. The appliances themselves are not defined, so any orthodontic appliance may be considered; the term "appliance" is extremely broad and will be interpreted in such a manner.

With respect to independent claim 16, the passage, "for use in an organizer system... substantial reorientation" is considered an intended use. The recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. The structure of the appliance constraining element is not defined in the claim; therefore any structure capable of holding an appliance in a fixed orientation, with or without the cover, will meet the claim language as presented. The structure of the "guide structure" is not defined in the claim; therefore any structure capable of fixing the package with respect to an unspecified tray will meet the claim language as presented.

The remaining claims and independent claims will be examined with their due breadth and specificity. Generic "structures" with associated functional recitations will

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be addressed by any structures capable of performing the function. Intended use recitations will be addressed by any structures capable of the intended use.

Claim Objections

4. Claims 13-15 are objected to because of the following informalities:

Claims 13-15 recite, "The system", whereas no system is previously defined.

Claim 29: The recitation, "the recess a plurality of cavities" in line 4 is grammatically incorrect.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claims 19 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 recites the limitation "each of the cavities" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 (which depends from claims 21 and 16) recites the limitation "the flange" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. Claims 7, 8, 13, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Perfect (US 4,085,845; previously provided).

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Claim 7: Perfect discloses an appliance organizer comprising an appliance organizer tray 1, having a setup tray support 5 with structure (sidewalls) to restrain a setup tray in a fixed orientation, and a plurality of holders 26 & 27 situated to define a predetermined orientation and with structure (sidewalls) for holding an orthodontic appliance 12 & 13 in the same orientation. Perfect is capable of use in the claimed manner.

Claim 8: Perfect discloses package-receiving structures 28 & 29 that are capable of functioning as claimed.

Claim 13: Perfect discloses setup tray 14 and appliances 12 & 13.

Claims 7 & 26: In an alternate interpretation, Perfect discloses an appliance organizer comprising an appliance organizer tray 1, having a setup tray support 32 with structure 38 to restrain a setup tray in a fixed orientation, a first plurality of holders 5 & 6 situated to define a predetermined orientation and with structure (sidewalls) for holding an orthodontic appliance 14 in the same orientation relative to the holder, and a second plurality of holders 26 & 27 situated to define a predetermined orientation and with structure (sidewalls) for holding an orthodontic appliance 12 & 13 in the same orientation relative to the holder. Perfect is capable of use in the claimed manner.

7. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown (US 4,191,291; previously provided).

Brown discloses an organizer tray 12 having a setup tray support 40 with structure 42/44 to restrain the orientation of the setup tray 48, and a plurality of holders

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32/36 with structure capable of holding unspecified orthodontic appliances in a restricted (i.e. vertical) orientation. Brown is fully capable of functioning as claimed.

8. Claims 16, and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bozman (US 5,759,028; provided by applicant).

Claim 16: Bozman discloses an orthodontic appliance package 20 with a carrier 22 having a plurality of appliance constraining elements (well 32 and light-curable cement), a cover 24, a plurality of orthodontic appliances 10 in the constraining elements, and a guide structure (angled sidewalls). Bozman is capable of functioning as claimed.

Claim 20: Bozman anticipates a plurality of package and different brackets (see for example Col. 3, lines 15-35).

Claim 21: Cover 24 is slidable.

Claim 22: Insofar as the scope of the claim may be determined, cover 24 is slidable on flanges (angled portions of carrier 22).

Claim 23: Bozman discloses cavities 32.

9. Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by James (US 5,221,202; provided by applicant).

Upward and downward are relative terms, solely based on the orientation of the object. As the claim does not require any particular directional orientation of the cavities with respect to the recess, James discloses a package 10 that reads on claim 29 when

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placed upside-down with respect to the orientation depicted in Figures 2 and 3. It is an elongated carrier with a flange that forms a planar upward surface having straight, parallel sides and two end tabs that may be considered handles. Cavities 11-17 are located in along a longitudinal centerline of a recess (albeit oppositely facing) with brackets 1 arranged as claimed (compare Figure 3 of James and Figure 2 of the instant application to note that the orientation of the brackets is the same).

Claim Rejections - 35 USC § 103

10. Claims 7-10, 13, 14, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chester et al (US 5,350,059; provided by applicant) in view of Georgakis (US 4,898,276; previously provided).

Claim 7: Chester discloses an organizer tray **30** with a plurality of holders (recesses formed by **60/64/66**) with structure **64/66** for holding an orthodontic appliance **22** in a restricted orientation (see Figure 6). Chester suggests the use of a set-up tray **34a/34b/34c** but does not expressly disclose a set-up tray support on the organizer tray.

Georgakis teaches a set-up tray support **21** on organizer tray **11** with structure to restrain the set-up tray relative to the organizer tray (sidewalls of **21**) for the temporary positioning of orthodontic brackets in readiness for intra-oral placement (Col. 4, lines 7-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tray of Chester with a set-up tray support as taught by Georgakis in order to temporarily position orthodontic brackets in readiness for intra-oral placement.

Claim 8: The structure of Chester is configured to receive a package of appliances (see Figure 6) in fixed orientation.

Claim 9: Chester discloses a recess having opposed slots **68** configured to receive a flange of a package of appliances (see Figure 6).

Claim 10: Chester discloses the holders on opposing sides of tray **30** (see Figure 6).

Claims 13 and 28: Chester-Georgakis, as applied to claim 7 above, discloses the claimed invention. Georgakis suggests the placement of set-up trays within the set-up tray support. Chester teaches the appliances of a set of orthodontic brackets.

Claim 14: Chester teaches a package of appliances (see Figure 6).

Claim 25: Insofar as the appliances are not positively claimed in the claims dependency chain, Chester is capable of retaining appliances in opposing directions.

11. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, as applied to claim 7 above, and further in view of Leigh (US 4,153,160; previously provided).

Brown, as applied to claim 7 above, discloses the claimed invention except for the compartmented base.

Leigh discloses a compartmented base **12** movably attached to a tray **11** for storing instruments in an organized and accessible manner (see Abstract). Leigh teaches a variety of compartment shapes, a number of which would be fully capable of retaining unspecified set-up trays. It would have been obvious to one of ordinary skill in

the art at the time the invention was made to provide the tray of Brown with a compartmented base as taught by Leigh in order to store instruments in an organized and accessible manner.

12. Claims 15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chester-Georgakis as applied to claim 14 above, and further in view of Roberts (US 622,396).

Chester-Georgakis, as applied to claim 14 above, discloses the claimed invention except for the compartmented base with a plurality of packages of orthodontic appliances.

Roberts discloses a compartmented base **B/B'/C** used to store bulk articles of items retained in an upper tray A. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the organizer of Chester-Georgakis with a compartmented base retaining a bulk number of the items retained on the tray (packages of orthodontic appliances, Chester 22), as taught by Roberts, in order to provide a large number of articles to the end user.

As to the orientation of the holders, ribs 64 are oppositely facing in each of channels 68.

13. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over James in view of Dixon et al (US 6,482,003; provided by applicant).

James, as applied to claim 29 above, discloses the claimed invention except for the foam. Dixon teaches a foam insert 64 for immobilizing an orthodontic bracket (Col. 14, lines 55-57) and for said purpose, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the package of James with a foam insert.

14. Claims 31, 16-19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over James as applied to claim 29 above, and further in view of Bozman.

Claim 31: James, as applied to claim 29 above, discloses the claimed invention except for the cover. Bozman teaches a slidable cover 24 with channels (formed by portions 28 & 30) for protecting the appliances and for said purpose, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the package of James with a cover.

As to claims 16-19 and 24, James-Bozman, as applied to claim 31 above, discloses the claimed invention.

15. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bozman in view of Dixon et al (US 6,482,003; provided by applicant).

Bozman, as applied to claim 21 above, discloses the claimed invention except for the foam. Dixon teaches a foam insert 64 for immobilizing an orthodontic bracket (Col. 14, lines 55-57) and for said purpose, it would have been obvious to one of ordinary skill

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in the art at the time the invention was made to provide the package of Bozman with a foam insert.

Response to Arguments

16. Applicant's arguments filed 9 January 2007 have been fully considered but they are not persuasive.

Applicant's claim language is replete with functional language. It is well settled that it is possible for functional language to define structure, but that where no distinguishing structure has been defined, the claim is not patentable and is fully met by the reference. See *In re Swinehart*, 169 USPQ 226. See also *General Electric v. United States*, 198 USPQ 73 which further reinforced the concept that functional language which defines no structure cannot distinguish over the prior art. Moreover, "[A]pparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

As noted in section 3 above, applicant's claim language is broad enough to read on the cited prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

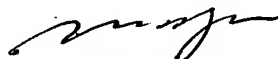
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Pickett whose telephone number is 571-272-4560. The examiner can normally be reached on Mon-Fri, 11:30 AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Pickett/
Examiner
Art Unit 3728



Mickey Yu
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